

REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-21 remain pending in the application. Claims 22 and 23 have been added. Support for the new claims appears, for example, at specification page 5, paragraph [0021].

Applicant notes with appreciation the Examiner's indication on page 3 of the Office Action that all of the dependent claims 2-15 and 17-21 contain allowable subject matter. However, Applicant's independent claims 1 and 16, are considered to afford Applicant a scope of protection which they are entitled to in light of the references relied upon by the Examiner.

More particularly, independent claims 1 and 16 were rejected in numbered paragraph 2 of the Office Action as being anticipated over U.S. Patent No. 5,757,954 (Kuan et al). This rejection is respectfully traversed, as the Kuan patent fails to teach or suggest use of segmenting image data into multiple windows as recited in claim 1, or processing down-sampled image data for detecting at least one of a light target and a dark target.

Applicant's Figure 1 shows an exemplary method 100 for detecting an object image within an image data. Image data received from a source can be segmented into multiple windows. As described in paragraph [0021], an image metric data established in step 101 can be fed to an isotropic detection technique (IDT) of a segmenting step 103, and compared with an image data. The image data is segmented into multiple windows at step 103. In step 104, the image data within each window is processed to determine a likelihood that the window contains the object, and the windows are rank ordered based on the step of determining.

As described in paragraph [0022], the segmenting can be performed using an isotropic detection technique, such as an autonomous, two-dimensional image target detection process. Figure 2 depicts an IDT top level algorithm flow associated with step 103. As described in paragraph [0031], the step 104 probability rank ordering multiple windows use the metric computer in step 103 to order target windows to be pulled as shown in step 120.

The foregoing features are broadly encompassed by independent claims 1 and 16. For example, claim 1 is directed to a method for detecting an object image within image data. The claim 1 method comprises, among other features, segmenting image data into multiple windows, and determining a likelihood that each contains the object, and probability rank ordering the multiple windows based on the step of determining. The claim 16 processing includes, among other features, processing down-sampled image data for detecting at least one of a light target and a dark target. Such a feature is, for example, performed using an isotropic detector. Such features are neither taught nor suggested by the Kuan patent.

The Kuan patent is directed to examining field of views of a slide to assess the likelihood of existing some detectable single cells, groups and thick groups of cells to locate objects of interest by an automated microscope. In numbered paragraph 3 of the Office Action, the first full paragraph on page 3 of the Office Action refers to column 6, lines 49-52 of the Kuan patent as describing morphological operation to remove isolated noise-like pixels.

Thus, at best, the Kuan patent is directed to using a morphological operator to provide noise filtering. This patent does not teach or suggest using a morphological operator to segment image data into multiple windows, and to determine a likelihood

that each window contains the object as recited in claim 1. Similarly, this patent fails to teach or suggest the claim 16 target detection process which includes, among other features, processing down-sampled image data for detecting at least one of a light target and a dark target. The Kuan patent does not address detection of light and dark targets, such that claim 16 is allowable.

Thus, independent claims 1 and 16 are considered allowable. All of the remaining claims refer to claims 1 and 16 and are allowable as well.

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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Date: May 31, 2005

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